

WHAT IS CLAIMED IS:

1. A printing apparatus which performs printing using a printhead having plural printing elements, comprising:

- 5        print data addition device configured to add print data corresponding to a defective printing element among said plural printing elements to print data corresponding to at least one adjacent normal printing element;
- 10        mask device configured to mask the print data corresponding to said defective printing element; and
- printing device configured to perform printing based on the print data as a result of addition by said print data addition device and the print data masked
- 15 by said mask device.

2. The printing apparatus according to claim 1, wherein said printing device prints an image by 1-path printing.

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3. The printing apparatus according to claim 1, wherein said print data addition device adds the print data corresponding to said defective printing element to print data corresponding to one adjacent normal
- 25 printing element.

4. The printing apparatus according to claim 1,  
wherein said mask device masks the print data  
corresponding to said defective printing element with 0  
as null data.

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5. The printing apparatus according to claim 1,  
wherein said print data addition device sequentially  
distributes the print data corresponding to said  
defective printing element between print data  
10 corresponding to two adjacent normal printing elements.

6. The printing apparatus according to claim 1,  
wherein said print data addition device detects on/off  
states of print data corresponding to two adjacent  
15 normal printing elements and distributes the print data  
corresponding to said defective printing element based  
on the result of detection.

7. The printing apparatus according to claim 6,  
20 wherein detection of on/off states of the print data is  
made as a case where one of the data corresponding to  
the two adjacent normal printing elements is on or off,  
and wherein if one of the data corresponding to the two  
adjacent normal printing elements is on, said print  
25 data addition device adds the data corresponding to  
said defective printing element to off data of the data  
corresponding to the two adjacent normal printing

elements, while if one of the data corresponding to the two adjacent normal printing elements is off, said print data addition device sequentially distributes the data corresponding to said defective printing element  
5 between the data corresponding to the two adjacent normal printing elements.

8. A printing apparatus control method for controlling a printing apparatus which performs  
10 printing using a printhead having plural printing elements, comprising:

a print data addition step of adding print data corresponding to a defective printing element among said plural printing elements to print data  
15 corresponding to at least one adjacent normal printing element;

a mask step of masking the print data corresponding to said defective printing element; and

a printing step of performing printing based on  
20 the print data as a result of addition at said print data addition step and the data masked at said mask step.

9. The printing apparatus control method according  
25 to claim 8, wherein at said printing step, an image is printed by 1-path printing.

10. The printing apparatus control method according to claim 8, wherein at said print data addition step, the print data corresponding to said defective printing element is added to print data corresponding to one adjacent normal printing element.

11. The printing apparatus control method according to claim 8, wherein at said mask step, the print data corresponding to said defective printing element is masked with 0 as null data.

12. The printing apparatus control method according to claim 8, wherein said print data addition step, the print data corresponding to said defective printing element is sequentially distributed between print data corresponding to two adjacent normal printing elements.

13. The printing apparatus control method according to claim 8, wherein at said print data addition step, on/off states of print data corresponding to two adjacent normal printing elements are detected and the print data corresponding to said defective printing element is distributed based on the result of detection.

14. The printing apparatus control method according to claim 13, wherein detection of on/off states of the print data is made as a case where one of the data

corresponding to the two adjacent normal printing elements is on or off, and wherein if one of the data corresponding to the two adjacent normal printing elements is on, the data corresponding to said defective printing element is added to off data of the data corresponding to the two adjacent normal printing elements at said print data addition step, while if one of the data corresponding to the two adjacent normal printing elements is off, the data corresponding to said defective printing element is sequentially distributed between the data corresponding to the two adjacent normal printing elements at said print data addition step.

15 15. A control program for a printing apparatus which performs printing using a printhead having plural printing elements, for realizing functions of performing:

20 a print data addition step of adding print data corresponding to a defective printing element among said plural printing elements to print data corresponding to at least one adjacent normal printing element;

a mask step of masking the print data corresponding to said defective printing element; and  
25 a printing step of performing printing based on the print data as a result of addition at said print

data addition step and the data masked at said mask step.

16. A computer-readable storage medium holding a  
5 control program for a printing apparatus which performs printing using a printhead having plural printing elements, or realizing functions of performing:

a print data addition step of adding print data corresponding to a defective printing element among  
10 said plural printing elements to print data corresponding to at least one adjacent normal printing element;

a mask step of masking the print data corresponding to said defective printing element; and

15 a printing step of performing printing based on the print data as a result of addition at said print data addition step and the data masked at said mask step.

20 17. A printing apparatus which performs printing using a printhead having plural printing elements, comprising:

print data addition means for adding print data corresponding to a defective printing element among  
25 said plural printing elements to print data corresponding to at least one adjacent normal printing element;

mask means for masking the print data  
corresponding to said defective printing element; and  
printing means for performing printing based on  
the print data as a result of addition by said print  
5 data addition device and the print data masked by said  
mask device.